

## REMARKS

Favorable reconsideration is respectfully requested.

The claims are 35 to 45.

Undersigned acknowledges with appreciation the helpful interview with Examiner Edward Johnson on June 16, 2005.

No specific agreements were reached at said interview, although the Examiner indicated that he might favorably consider the present claims upon further review.

A summary of the representations at said interview are included in the remarks below.

The above amendment presents a new set of claims wherein:

<u>New Claim</u>	<u>Replaces Claim</u>
35	19
36	20
37	21
38	22
39	23
40	24
41	25 (part)
42	25 (part)
43	26
44	34
45	new (see Examples and Fig. 3)
46	new (see paragraph bridging pp. 7 and 8 of specification)

In the present process, a hydrolyzable titanium compound in a solvent is employed to form a gel. Included in the gel is an organic polymer. The gel containing the organic polymer and hydrolyzed titanium compound is reacted with hot water which elutes the organic polymer from the gel, whereby anatase titanium or composite oxide containing anatase titanium is formed. Elution of the organic polymer results in modified pore size and surface area of the anatase titanium. See pages 8 and 9 of the specification.

These features are nowhere disclosed nor suggested by the prior art as will be discussed below.

Claims 19 to 24 and 27 to 34 are rejected under 35 U.S.C. 102(a) as being anticipated by Tada et al. WO 98/27021 (translated in US 6,379,76).

This rejection is respectfully traversed.

Tada relates to a TiO<sub>2</sub> catalytic film laminated on the surface of a substrate.

As noted by the Official Action, there is disclosed in Tada a method of producing TiO<sub>2</sub> by hydrolyzing a titanium compound (column 6, lines 47 to 65).

In Embodiment 2 of Tada, relied on by the Official Action, no mention is made of a gel from a hydrolyzable titanium compound containing an organic polymer. All that is mentioned in Embodiment 2 of Tada is that hydrolyzed, condensed and polymerized solution ethyl silicate and colloidal silicon oxide are blended.

In column 16, lines 50 et seq., reference is made to dripping acetylacetone into titanium tetraisopropoxide. However, no mention is made of a polymer in a gel.

Similarly, in Embodiment 3, titanium tetraisopropoxide and diethanolamine are admixed and trifluoroacetate is added. After the two solutions were mixed and agitated, water and polyethylene glycol were added until a uniform solution was obtained.

In no case, is a gel containing a polymer formed which is then reacted with water, whereby the polymer is eluted from the gel, particularly to control surface properties or porosity of the titanium dioxide.

Nor is it clear that anatase titania is produced in Tada.

The above comments are also applicable to the rejection of claims 25 and 26 under 35 U.S.C. 102(a) or 103(a) as obvious over Tada '776.

Claims 19 to 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Remy '884.

This rejection is respectfully traversed.

Remy employs an aqueous solution of titanium chloride and iron chloride in Example 1. No mention is made of a polymer being present in a gel from said solution, no less eluting said polymer after reaction with water to control porosity and surface area of the titanium oxide.

While polymers may be added as thickeners as set forth in column 5 in Remy, these are not added to a gel.

Thus, Remy is clearly unsuggestive of the process of the present claims.

The titania of the cited references is not controlled in any way with respect to porosity and/or surface area in view of the differences in the manner by which the titania is produced.

For the foregoing reasons it is apparent that the rejections on prior art are untenable and should be withdrawn.


No further issues remaining, allowance of this application is respectfully requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact undersigned at the telephone number below.

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Respectfully submitted,

Tsutomu MINAMI et al.

By:   
Matthew M. Jacob  
Registration No. 25,154  
Attorney for Applicants

MJ/kes  
Washington, D.C. 20006-1021  
Telephone (202) 721-8200  
Facsimile (202) 721-8250  
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